	Application No.	Applicant(s)
	09/903,212	CHAN, JOSEPH C.
Notice of Allowability	Examiner	Art Unit	
	Allen Wong	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *applicant's authorization for examiner's amendment on 10/18/04.*

2. ☒ The allowed claim(s) is/are *1-33.*

3. ☒ The drawings filed on *10 July 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Attorney Bill Schaal on October 18, 2004.

The application has been amended as follows:

Claim 25, line 6, after "receive", -- a first set of motion vectors including -- has

been inserted.

Claim 25, line 13, "vector that produces best image smoothness." has been

changed to -- vectors that produces best image smoothness, wherein at least said

motion compensated temporal replacement element, said image smoothness evaluator

and said best smoothness selector repeating operations of (i) performing motion

compensated temporal replacement of texture data using said decoded and estimated

motion vectors and (ii) evaluating smoothness of said series of replaced texture data

with one less decoded motion vector and one more estimated motion vector in said first

set of motion vectors to generate a second set of motion vectors until there are no more

decoded motion vectors left in said second set of motion vectors, and then, said best

smoothness selector selecting said best set of motion vectors from said second set of

motion vectors to replace corrupted motion vectors in a video packet associated with

said video packet error. -- .

Allowable Subject Matter

1.   Claims 1-33 are allowed.

2.   The following is an examiner's statement of reasons for allowance: Boyce

discloses methods and apparatus for encoding video data using motion vectors for

decoding by regular or downconverting decoders. Lee discloses moving picture coding

method and apparatus for low bit rate systems using dynamic motion estimation.

Neither Boyce nor Lee, taken alone or in combination, disclose, teach or suggest the

limitation, "repeating said decoding, estimating, performing, and evaluating with one

less motion vector in the first set and one more motion vector in the second set, said

repeating done until there is no more motion vector left in the first set; and selecting sets

of motion vectors from said first and second sets to replace motion vectors in said

corrupted video packet, where said sets of motion vectors produce a best image

smoothness measure of said texture data", used in combination with all of the other

limitations of the claim 1.

Similarly, neither Boyce nor Lee, taken alone or in combination, disclose, teach

or suggest the limitation "repeating said creating, performing, and evaluating with one

less decoded motion vector and one more estimated motion vector, to generate a

plurality of said first set of motion vectors, said repeating done until there is no more

decoded motion vector left; and selecting a best set of motion vectors from said plurality

of said first set of motion vectors to replace corrupted motion vectors in said video

packet, where said best set of motion vectors produce a best image smoothness measure of said texture data", used in combination with all of the other limitations of claim 24.

And, neither Boyce nor Lee, taken alone or in combination, disclose, teach or suggest the limitation, "wherein at least said motion compensated temporal replacement element, said image smoothness evaluator and said best smoothness selector repeating operations of (i) performing motion compensated temporal replacement of texture data using said decoded and estimated motion vectors and (ii) evaluating smoothness of said series of replaced texture data with one less decoded motion vector and one more estimated motion vector in said first set of motion vectors to generate a second set of motion vectors until there are no more decoded motion vectors left in said second set of motion vectors, and then, said best smoothness selector selecting said best set of motion vectors from said second set of motion vectors to replace corrupted motion vectors in a video packet associated with said video packet error", used in combination with all of the other limitations of claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Boyce et al. (5,974,185) disclose methods and apparatus for encoding video data

using motion vectors for decoding by regular or downconverting decoders.

Lee et al. (6,052,414) disclose moving picture coding method and apparatus for

low bit rate systems using dynamic motion estimation.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Allen Wong whose telephone number is (703) 306-5978.

The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.
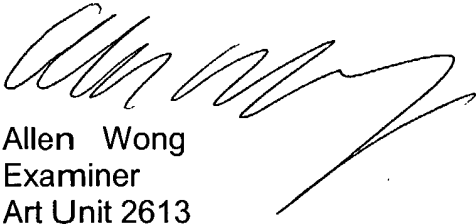
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Allen   Wong
Examiner
Art Unit 2613

AW
10/20/04